



## Intelligent Transportation Systems Standards Fact Sheet



### IEEE Std 1512 - 2000

July 2000

## Standard for Common Incident Management Message Sets for Use by Emergency Management Centers

### Overview

Coordination among the emergency management centers of agencies that respond to traffic-related incidents can be aided by a common set of established procedures and operational methods for exchanging vital data concisely, unambiguously, and rapidly. Typically, each involved agency has responsibilities that vary over time, based upon the type of incident, local custom, and agreed-upon responding resource allocations, which may be determined at the incident scene or at dispatching points within each agency.

This standard, **IEEE Std 1512 - 2000, Standard for Common Incident Management Message Sets for Use by Emergency Management Centers**, addresses the messages communicated among different agencies' emergency management centers during and after the occurrence of an emergency incident. It has been carefully tailored to allow a wide range of local variation in implementation, consistent with the National Intelligent Transportation System (ITS) Architecture. In addition, this standard includes messages from prior standards, which are referenced.

To obtain a copy of this standard, please contact:

**Institute of Electrical and Electronics Engineers (IEEE)**

445 Hoes Lane, P.O. Box 1331  
Piscataway, NJ 08855

Tel: (732) 981-0060 or  
(800) 678-IEEE

Fax: (732) 981-9667

Web site: [www.ieee.org](http://www.ieee.org)

E-mail: [customer.service@ieee.org](mailto:customer.service@ieee.org)

Publication Date: July 2000

### What is this standard for?

This standard (which includes the base standard and its companion volumes) provides a framework for the exchange of messages among emergency management centers. It does not limit the data contained in the messages; rather, it allows the transmission of any mutually agreed-upon messages among centers, as well as messages composed of standard ITS data elements. It remains the responsibility of the participating local jurisdictions to determine the level of interoperation that meets their needs.

### Who uses it?

This standard is intended for use by traffic managers, traffic engineers, and communication engineers involved in the specification, selection, procurement, installation, operation, and maintenance of incident management systems. It is applicable for specifying, selecting, procuring, installing, operating, and maintaining systems that exchange information using ITS communications systems. Local agencies can use this standard as part of their efforts to determine requirements for interoperation with other emergency management agencies at the local level, and to attain a mutual agreement on the mechanisms for exchanging data when designing and developing coordinated emergency management systems.

### How is it used?

This standard is used as the basis of mutual agreements among emergency management agencies to exchange information during incidents using messages comprised of agreed-upon data elements. The messages have been structured so that centers can continue to use different legacy systems. This standard also provides an overview of the relationships between the messages and examples of use with other ITS message sets.

## Scope

This standard is part of a family of related standards that address the communication needs of emergency and traffic management agencies that are involved in highway incident management and that need to exchange information with each other. This standard describes a set of basic messages that allow the exchange of data for information and coordination during the processing of an incident, within the National ITS Architecture. It gives local agencies the ability to determine the level of cooperation and the messages that best meet their needs.

This standard is not intended to limit the numbers of messages or the content of messages exchanged among the participating agencies in an incident management situation. It provides examples for the structure of messages and an encoding mechanism. A companion volume, the standard for Emergency Management Data Dictionary, will include data concepts from organizations that are active participants in incidents and are authorities in their respective areas of expertise.

## Related documents

The base standard and its companion volumes are being developed by the IEEE Incident Management Working Group:

### **IEEE Std 1512-2000 – Standard for Common Incident Management Message Sets for Use by Emergency Management Centers (this standard)**

IEEE P1512.1 -- Standard for Traffic Incident Management Message Sets for Use by Emergency Management Centers

IEEE P1512.2 -- Standard for Public Safety Incident Management Message Sets for Use by Emergency Management Centers

IEEE P1512.3 -- Standard for Hazardous Materials Incident Management Message Sets for Use by Emergency Management Centers

IEEE P1512a -- Standard for Emergency Management Data Dictionary

Message sets for other areas related to incident management are under consideration by the P1512 Working Group for future development projects.